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JOYCE VON NATZMER PEQUIGNOT + MYERS LLC 200 Madison Avenue Suite 1901 New York, NY 10016			EXAMINER VAINBERG, SIMON	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/505,149	<b>Applicant(s)</b> MULLER-HARTMANN ET AL.	
	<b>Examiner</b> Simon Vainberg	<b>Art Unit</b> 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 21-25 and 28 and 29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20, 26 and 27 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>08/20/2004 and 11/22/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claims 1-20, 26 and 27, drawn to container.

Group II, claim 21, drawn to method of producing containers or container.

Group III, claims 22, 28 and 29. Method for treatment of cells.

2. The inventions listed as Groups I and II and III and II and III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features. The expression "special technical features" shall mean those technical features that define a contribution which each of the claimed invention considered as a whole, makes over the prior art for the following reasons. Although inventions of Group I, II and III share the special technical future, which is a container, this special technical future does not define a contribution over the prior art for the following reason: claim 1 is either obvious or anticipated by US 2002/0164776 in view of US Patent 4765874.

3. Accordingly, the special technical feature linking the inventions, i.e. container does not provide a contribution over the prior art, and no single general inventive concept exists. Therefore the restriction is appropriate.

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4. During a telephone conversation with Ms. Joyce von Natzmer on October 11, 2007 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-20, 26 and 27. Affirmation of this election must be made by applicant in replying to this Office action. Claims 21, 22, 28 and 29 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### ***Double Patenting***

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claim 1 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 24 of copending Application No. 10/972294. Although the conflicting claims are not identical, they are not patentably distinct from each other because both claims teach an electrode (called formed body in claim 24, confirmation of this statement see in claim 33 of copending Application No. 10/972294). Electrode is made of a polymer, which is doped with a conductive substance.

Claim 1 of the current application teaches that overall concentration of dope in plastic material as 20-80%. Claim 24 of copending application 10/972294 does not disclose concentration of dope in plastic.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to fabricate the plastic with dope concentration 20-80%, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim 5 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 31 of copending Application No. 10/972294. Although the conflicting claims are not identical, they are not patentably

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distinct from each other because contain the same plastic materials (polycarbonate, polyetheretherketone, etc.).

Claim 6 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 32 of copending Application No. 10/972294. Although the conflicting claims are not identical, they are not patentably distinct from each other because contain the same intrinsically conductive plastic material (polyaniline, polyacetylene, etc.).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

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under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 1, 5, 6 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beichmann et al. (US 2002/0164776) in view of Modes et al. (US Patent 4765874).

Regarding claim 1, Beichmann et al. teaches a container (10) (called chamber) for receiving an aqueous solution, which is formed at least partially by an outer limit (called walls) which forms an inner chamber (14) for receiving said solution (15), and which comprises at least one area which acts as an electrode (16) (see Fig. 1 and paragraphs 0036 and 0038) when an electric voltage is applied and a subsequent discharge occurs (see claim 1), wherein said at least one electrode is made of a conductive synthetic material (see paragraph 0022 lines 1 and 2). Beichmann et al. further teaches that electrically conductive plastics (carbon-filled plastics) may be used as suitable electrically conductive material (see paragraphs 0025).

Beichmann et al. does not teach that the overall concentration of said dope in said plastic material is 20 - 80 % w/w.

Modes et al. teaches an electrode fabricated from electroconductive plastic consisting of polymers and 5 to 80% of dope (graphite) by weight (see column 3 lines 8-10).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teaching of Beichmann et al. by fabricating an

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electrode from a plastic with content of the graphite from 20 to 80% w/w as taught by Modes et al. because it makes an electrode a corrosion resistant and provides the required electrical parameters of the electrode.

Regarding claim 5, Beichmann et al. and Modes et al. teaches a container according to claim 1, wherein said plastic material is polycarbonate, polyetheretherketone, polypropylene, polyamide, polyphenylensulfide or a mixture of these polymers, or at least based on one or several of these polymers, and/or wherein said plastic material is an intrinsically conductive synthetic material.

Modes et al. teaches that suitable plastics can be used for the fabricating of electrodes. Examples are polypropylene, polyamides and polycarbonates (see column 2 lines 62-66).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teaching of Beichmann et al. by using different plastics including polypropylene, polyamides or polycarbonates to fabricate the electrodes as taught by Modes et al. because all these materials have sufficient chemical resistance and moldability.

Regarding claim 6, Beichmann et al. and Modes et al. teach a container according to claim 5, wherein said intrinsically conductive synthetic material is polypropylene.

Modes teaches a polypropylene (see column 2 line 64).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teaching of Beichmann et al. by using different



plastics including polypropylene to fabricate the electrodes as taught by Modes et al. because polypropylene has a sufficient chemical resistance and moldability.

See also objection to this claim.

Regarding claim 6, Beichmann et al. and Modes et al. teach a container according to claim 1, comprising at least two electrodes being made of the same material.

Beichmann et al. teaches a container (10) comprising electrodes (16, 17, 18 and 19) (see paragraph 0038). Beichmann et al. further teaches that electrodes are made of electrically conductive material (see claim 7).

Regarding claim 26, Beichmann et al. and Modes et al. teach a container according to claim 1, wherein aqueous solution comprises cells.

Beichmann et al. teaches a chamber for treating cells in a suspension, which inherently is aqueous (see claim 1).

12. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beichmann et al. (US 2002/0164776) and Modes et al. (US Patent 4765874), as applied to claim 1 in view of Offenbacher (US 2002/0005352).

Regarding claim 2, Beichmann et al. and Modes et al. teach a container according to claim 1, except a dope consists essentially of carbon fibers, graphite, soot and/or carbon nanotubes.

Offenbacher teaches electrodes fabricated from a mixture of polymer and elementary carbon wherein the elementary carbon is preferably graphite and/or soot and/or graphite fiber and/or glassy carbon (see paragraph 0019).

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Beichmann et al. and Modes et al. by using a carbon in form as carbon fibers, graphite and soot as taught by Offenbacher because it allows to make a corrosion resistant electrode with good adsorbed properties for oxygen, which has advantageous effects on the long-term stability of the electrode system.

13. Claims 7, 9, 19 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beichmann et al. (US 2002/0164776) and Modes et al. (US Patent 4765874), as applied to claim 1 in view of Hofmann et al. (US Patent 5676646).

Regarding claim 7, Beichmann et al. and Modes et al. teach a container according to claim 1, except said outer limit is made of a synthetic material.

Hofmann et al. teaches an electroporation container (90) (called cuvette chamber) wherein outer limit (92) (called enclosure) is fabricated from a synthetic material (plastic) (see column 5 lines 46-48 and Fig. 3).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Beichmann et al. and Modes et al. by fabricating the enclosure from a plastic because it reduces the cost of the cuvette.

Regarding claim 9, Beichmann et al. and Modes et al. teach a container according to claim 1, except said at least one electrode is integrated into said outer limit.

Hofmann et al. teaches the enclosure (92) which is molded with a pair of embedded elongated electrodes (98) and (100) (see column 5 lines 54-56).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Beichmann et al. and Modes et al. by integrating an electrode into enclosure as taught by Hoffmann et al. because it simplifies the process of the cuvette fabrication..

Regarding claim 19, Beichmann et al. and Modes et al. teach a container according to claim 1, except said outer limit comprises at least one opening for supplying said solution and at least one opening for draining off said solution.

Hoffmann et al. teaches a container (90) wherein outer limit comprises one opening (called hole for inserting of tubing (30)) for supplying said solution and one opening (called hole for inserting of tubing (32)) for draining off said solution (see Fig. 3 and column 5 lines 50-54).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Beichmann et al. and Modes et al. by fabricating two openings in a container as taught by Hofmann et al. because it allows to deliver pharmaceutical compounds into living blood cells of a patient.

Regarding claim 27, Beichmann et al. and Modes et al. teach a container according to claim 1, wherein said synthetic material is a transparent plastic.

Hofmann et al. teaches an electroporation container (90) (called cuvette chamber) wherein outer limit (92) (called enclosure) is fabricated from a clear plastic (see column 5 lines 46-48).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Beichmann et al. and Modes et al. by

fabricating the enclosure from a clear plastic because it allows to conduct the optical analysis of the cells functions.

14. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beichmann et al. (US 2002/0164776) and Modes et al. (US Patent 4765874), as applied to claim 1 in view of Bertling (WO99/64157, see English equivalent US Patent 6383802).

Regarding claim 11, Beichmann et al. and Modes et al. teach a container according to claim 1 comprising at least two electrodes, except said at least two electrodes are made of different materials.

Bertling teaches a container comprising a lid and support. Lid can be made of an electricoconductive material, preferably a plastic. The support can exhibit an electrode, preferably an electrode made of platinum, so that an electrical field can be applied between the lid and the support (see column 2 lines 49-53).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Beichmann et al. and Modes et al. by making electrodes from different materials as taught by Bertling because it allows to study the movement of different types of organic molecules in an electrical field.

15. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beichmann et al. (US 2002/0164776), Modes et al. (US Patent 4765874) and Hoffmann et al. (US Patent 5676646), as applied to claim 7 in view of MedProbe (from Internet Archive 05/03/2001 web site

<http://web.archive.org/web/20010503045345/http://www.medprobe.com/no/mbp.html>)

Regarding claim 8, Beichmann et al., Modes et al. and Hoffman et al. teach a container according to claim 7, except said synthetic material is the same plastic material as the plastic material on which said at least one electrode is based.

MedProbe teaches an electroporation cuvette made from a polycarbonate (see page 2 of printed web site information). Polycarbonate is the same material, which is recommended for the electrode fabrication.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Beichmann et al., Modes et al. and Hoffmann et al. by fabricating the cuvette from a polycarbonate as taught by MedProbe because this material has excellent moldability and optical and thermoresistant properties.

16. Claims 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beichmann et al. (US 2002/0164776) and Modes et al. (US Patent 4765874), as applied to claim 1 in view of Saito et al. (US 2002/0028368).

Regarding claim 14, Beichmann et al. and Modes et al. teach a container according to claim 1, except that at least one electrode is made of polycarbonate doped with 15-40% w/w carbon fibers and 1-40% w/w graphite.

Saito et al. teaches electrically conductive resinous compositions superior in electrical conductivity, mechanical properties, chemical resistance and moldability, which include a thermoplastic resin ( see paragraph 0011 and 0025), an electrically conductive carbon powder and may be incorporated with optional additives such as

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fibrous base material (see paragraphs 0025 and 0046). This material is capable to be used as a material for the electrodes.

Saito et al. further teaches a resinous composition comprising a thermoplastic resin, which includes a polycarbonate resin (see paragraph 0026). The electrically conductive carbon powder is exemplified by flake graphite, massive graphite, artificial graphite, kish graphite and expansible graphite (see paragraph 0042). The carbon powder should be added in an amount of 100-10000 parts by mass for 100 parts by mass of the thermoplastic resin (see paragraph 0045) what is equal to 50-99% w/w of a total mass. The fibrous base material includes a carbon fiber, which should be used in an amount of 0-100 parts by mass for 100 parts by mass of thermoplastic resin (see paragraph 0047) what is equal to 0-50% w/w of a total mass.

Saito et al. does not teach that graphite is added at concentration 1-40% w/w .

It would have been obvious to one having ordinary skill in the art at the time the invention was made to determine the optimal range of added graphite, since it has been held that where the general conditions of a claim are disclosed in the prior art , discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Also, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Beichmann et al. and Modes et al. by fabricating the electrode from electrically conductive resinous composition comprising a polycarbonate resin doped with 0-50 % w/w of carbon fiber and graphite

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as taught by Saito et al. because it allows to produce a material with required electrical properties.

Regarding claim 15, Beichmann et al. and Modes et al. teach container according to claim 1, except that at least one electrode is made of polyetheretherketone doped with 30 - 50 % w/w carbon fibers.

Saito et al. teaches electrically conductive resinous compositions superior in electrical conductivity, mechanical properties, chemical resistance and moldability, which include a thermoplastic resin ( see paragraph 0011 and 0025). This conductive resinous compositions may be incorporated with optional additives such as fibrous base material (see paragraph 0046) and is capable to be used as a material for electrodes.

Saito et al. further teaches a resinous composition comprising a thermoplastic resin, which includes a poly-ether-ether-ketone resin (see paragraph 0026). Fibrous base material includes a carbon fiber, which should be used in an amount of 0-100 parts by mass for 100 parts by mass of thermoplastic resin (see paragraph 0047).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Beichmann et al. and Modes et al. by fabricating the electrode from electrically conductive resinous composition comprising a poly-ether-ether-ketone resin doped with 0-100 % w/w of carbon fiber as taught by Saito et al. because it allows to produce a material with required electrical properties.

Regarding claim 16, Beichmann et al. and Modes et al. teach a container according to claim 1, except that at least one electrode is made of polyamide, preferably polyamide 66, doped with 20-40% w/w carbon fibers.

Saito et al. teaches electrically conductive resinous compositions superior in electrical conductivity, mechanical properties, chemical resistance and moldability, which include a thermoplastic resin ( see paragraph 0011 and 0025). This conductive resinous compositions may be incorporated with optional additives such as fibrous base material (see paragraph 0046) and is capable to be used as a material for electrodes.

Saito et al. further teaches a resinous composition comprising a thermoplastic resin, which includes a polyamide resin (see paragraph 0026). Examples of the polyamide resin include polyamide 66 (called nylon- 66) (see paragraph 0028). Fibrous base material includes carbon fiber , which should be used in an amount of 0-100 parts by mass for 100 parts by mass of thermoplastic resin (see paragraph 0047).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Beichmann et al. and Modes et al. by fabricating the electrode from electrically conductive resinous composition comprising a polyamide resin doped with 0-100 % w/w of carbon fiber as taught by Saito et al. because it allows to produce a material with required electrical properties.

Regarding claim 17, Beichmann et al. and Modes et al. teach a container according to claim 1, except that at least one electrode is made of polypropylene doped with 20 % w/w carbon fibers.

Saito et al. teaches electrically conductive resinous compositions superior in electrical conductivity, mechanical properties, chemical resistance and moldability, which include a thermoplastic resin ( see paragraph 0011 and 0025). This conductive



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resinous compositions may be incorporated with optional additives such as fibrous base material (see paragraph 0046) and is capable to be used as a material for electrodes.

Saito et al. further teaches a resinous composition comprising a thermoplastic resin, which includes a polypropylene resin (see paragraph 0026). Fibrous base material includes carbon fiber, which should be used in an amount of 0-100 parts by mass for 100 parts by mass of thermoplastic resin (see paragraph 0047).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Beichmann et al. and Modes et al. by fabricating the electrode from electrically conductive resinous composition comprising a polypropylene resin doped with 0-100 % w/w of carbon fiber as taught by Saito et al. because it allows to produce a material with required electrical properties.

Regarding claim 18, Beichmann et al. and Modes et al. teach a container according to claim 1, except that at least one electrode is made of polyphenylene sulfide doped with 30-50 % w/w carbon fibers.

Saito et al. teaches electrically conductive resinous compositions superior in electrical conductivity, mechanical properties, chemical resistance and moldability, which include a thermoplastic resin (see paragraph 0011 and 0025). This conductive resinous compositions may be incorporated with optional additives such as fibrous base material (see paragraph 0046) and is capable to be used as a material for electrodes.

Saito et al. further teaches a resinous composition comprising a thermoplastic resin, which includes a polyphenylene sulfide resin (see paragraph 0026). Fibrous base

material includes carbon fiber, which should be used in an amount of 0-100 parts by mass for 100 parts by mass of thermoplastic resin (see paragraph 0047).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Beichmann et al. and Modes et al. by fabricating the electrode from electrically conductive resinous composition comprising a polyphenylene sulfide resin doped with 0-100 % w/w of carbon fiber as taught by Saito et al. because it allows to produce a material with required electrical properties.

17. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beichmann et al. (US 2002/0164776) and Modes et al. (US Patent 4765874), as applied to claim 1 in view of Maher et al. (US 2002/0025573).

Regarding claim 20, Beichmann et al. and Modes et al. teach a container according to claim 1, except a container arrangement comprising at least two, preferably 6, 12, 24, 48, 96 or more containers being joined to build one unit.

Maher teaches a container arrangement for electrical stimulation of cells including an electroporation (see paragraphs 0006 and 0078) comprising a plurality of containers (called wells) joined in one unit (called multiwell plate) (see paragraph 0101 and Fig. 2A). Each well also contains electrodes fabricated from a conductive material (see Abstract).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Beichmann et al. and Modes et al. by fabricating a container as an unit comprising at least two wells as taught by Maher et al. because it allows to study the effect of different test compounds on the cells functions.

***Claim Rejections - 35 USC § 112***

18. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

19. Claims 3, 4, 12 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949).

20. In the present instance, claim 3 recites the broad recitation overall concentration of dope in plastic material 20-60% w/w, and the claim also recites 40-60% w/w and 50-60% w/w, which is the narrower statement of the range/limitation.

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21. In the present instance, claim 4 recites the broad recitation overall concentration of dope in plastic material 40-80% w/w, and the claim also recites 50-80%, 60-80% and 70-80% w/w, which is the narrower statement of the range/limitation.

22. In the present instance, claim 12 recites the broad recitation overall concentrations of carbon fibers 25-45% w/w and the claim also recites 30-40% w/w and 33-37% w/w, which is the narrower statement of the range/limitation.

Claim also recites the broad recitation overall concentrations of graphite 15-35% w/w and the claim also recites 20-30% w/w and 23-27% w/w, which is the narrower statement of the range/limitation.

23. In the present instance, claim 13 recites the broad recitation overall concentrations carbon fibers 30-50% w/w and the claim also recites 35-45% w/w and 39-41% w/w, which is the narrower statement of the range/limitation.

Claim also recites the broad recitation overall concentrations of graphite 25-45% and the claim also recites 30-40% w/w and 34-36% w/w, which is the narrower statement of the range/limitation.

### ***Claim Objections***

24. Claim 6 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim 5. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 6 <sup>claims</sup> ~~teaches~~ an intrinsically conductive synthetic material polypropylene.

Previous claim 5 also <sup>claims</sup> ~~teaches~~ a polypropylene.

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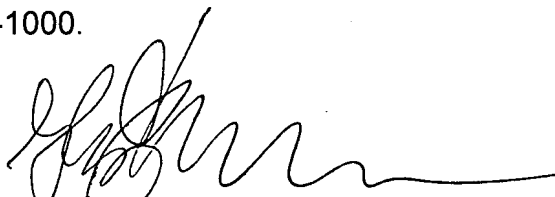
**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Simon Vainberg whose telephone number is 571-270-3150. The examiner can normally be reached on Monday- Thursday 7:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Griffin can be reached on 571-272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SV

  
GLADYS JP CORCORAN  
SUPERVISORY PATENT EXAMINER